specific options for modification of the rule. 855

373. In 1999, the Commission modified the rule to its current form. We found that the growth of media outlets and cable systems, the efficiencies of joint ownership, and the public service benefits obtained from joint operations all supported our decision to allow additional common ownership of radio and television stations. Although we decided not to eliminate the rule, we stated that we would continue to monitor the impact of the broadcast ownership rules on the industry and that we would further consider relaxation of the radio/television cross-ownership rule in future biennial reviews. In June 2000, we released the 1998 Biennial Report, where we concluded that further relaxation of the broadcast ownership rules was not then warranted. In light of the 1999 relaxation of the broadcast ownership rules, we decided to proceed cautiously and monitor the impact of the new rules on diversity and competition.

374. Under our statutory mandate pursuant to Section 202(h) of the 1996 Act, we are required to consider biennially whether "to 'repeal or modify' any rule that is not 'necessary in the public interest." In determining whether the rule meets this standard, we consider whether it is necessary to promote any of our public interest objectives. With respect to cross-ownership of radio and television stations in the same market, we reexamine the impact of the rule on competition, localism and diversity.

a. Competition

375. The Product Market. To assess the competitive impact of our radio/television cross-ownership rule, we need to determine whether radio and television stations compete for sources of revenue generation – in this case, advertising. 863 If we find that they do, i.e., that a significant number of

⁸⁵⁵ *Id* at 21685-87 ¶¶ 65-71

⁸⁵⁶ Local TV Ownership Report and Order, supra note 96 Also in the Local TV Ownership Report and Order we eliminated the five factor case-by-case waiver standard Currently, waivers are granted only in situations involving a "failed station" or other extraordinary circumstances.

⁸⁵⁷ Id at 12948 ¶ 102

⁸⁵⁸ Id at 12949 ¶ 106

^{859 1998} Biennial Review Report, 15 FCC Rcd at 11073 ¶ 26

⁸⁶⁰ In the 2000 Biennial Review proceeding, the Commission did not alter the recommendations it had made in the 1998 Biennial Review proceeding with respect to the radio/television cross-ownership rules. *See 2000 Biennial Regulatory Review*, supra, note 512

⁸⁶¹ Fox Television, 280 F.3d at 1042.

⁸⁶² Id.

The competitive analysis for both the local radio and the local television ownership rules focuses on two additional markets, delivered programming and programming production. However, in analyzing the effects of combined ownership of radio and television stations in a local market, neither of the latter product markets is relevant. Radio and television broadcasting are distinct programming markets with little overlap. The bulk of video entertainment and news programming available on commercial television is not suitable for radio. Similarly, audio radio programming, which is predominately music and talk show formats, cannot be replicated on television. Thus, (continued.)

advertisers consider radio and television to be good substitutes, then our concern would be that elimination or relaxation of the cross-ownership restrictions may enable a single firm to acquire sufficient market power to hinder small and independent broadcasters' efforts to generate revenue, and thereby put their continued viability at risk. However, if radio and television are not in the same product market, then we would have little concern that elimination or relaxation of the rule would have any negative effects on competition. Broadcasters compete with each other for audience share by offering quality programming of interest to local communities. Higher audience shares, in turn, attract advertisers, and thus, enable radio and television stations to generate revenue. Our continuing goal is to ensure that our rules and policies foster, rather than hinder, broadcasters' incentives and ability to compete for advertising revenues by providing consumers with innovative and quality programming, news, and information

376. In the *Notice* we asked commenters to provide us with evidence regarding the degree to which radio serves as an economic substitute for broadcast television.⁸⁶⁴ We noted that evidence showing radio and television are not economic substitutes would support relaxation or elimination of the current rule. The *DOJ/FTC Guidelines*⁸⁶⁵ define the relevant product market as the smallest group of competing products for which a hypothetical monopoly provider of the products would profitably impose at least a "small but significant and non-transitory price increase," presuming no change in the terms of sale of other products.⁸⁶⁶ Thus, when one product is a reasonable substitute for the other in the eyes of consumers, it is to be included in the relevant product market even though the products themselves are not identical.⁸⁶⁷ In the *Local Radio Ownership NPRM*, we noted that the Department of Justice views radio as a discrete market, "finding that advertisers find value in certain of radio's unique attributes."⁸⁶⁸

⁸⁶⁴ Notice, 17 FCC Red at 18537 ¶ 104.

⁸⁶⁵ DOJ/FTC Guidelines, supra note 285.

⁸⁶⁶ Id § 1 11

⁸⁶⁷ Id § 1 12 See, e g, EchoStar/DirecTV HDO, 17 FCC Rcd at 20605-06 ¶ 106

Local Radio Ownership NPRM, 16 FCC Rcd at 19879 ¶ 42.

substitution by consumers and advertisers CWA also urges the Commission to adopt structural rules that place ownership limits on each distinct media type. See CWA Comments at 2-3, 46. In rare instances, advertisers may consider radio and television to be good substitutes. Buckley, for example, states that competition between radio and television advertising exists in smaller markets, such as in the Monterey-Salinas market, where radio and television advertising rates are approximately the same during certain times of the day. See Buckley Comments at 3. The local television ownership rule and the local radio ownership rule will prevent any one entity from owning all of the broadcast television stations or all the broadcast radio stations in a local market. Thus, those advertisers (continued).

in MOWG Study No 10, Anthony Bush found weak substitutability between local media, including radio and television. In separately filed comments, both Professor Jerry Hausman and Dr. Bruce M. Owen criticize Bush for using national and regional, rather than local, advertising price data. As we noted above, we recognize the limitations of the SQAD data but believe the effects of these measurement errors may cancel out such that the estimates of Bush are unbiased. We weight the study accordingly and consider the other evidence on the record.

378 Moreover, other studies confirm Bush's conclusion that advertisers do not consider radio and television to be good substitutes. Silk, Klein, and Berndt (2002) examine advertising in the national markets for eight different media outlets. magazines, newspapers, network television, spot television, network radio, spot radio, outdoor billboards, and direct mail. The authors find that for advertisers in national markets, radio and television are weak substitutes. Reid and King (2000) used survey and interview methods to examine advertising managers' opinions of media substitutability. Their reports suggest that managers consider radio and broadcast television to be weak substitutes.

379 In addition to the empirical evidence, differences between radio and television programming and formats suggest that they do not compete in the same product market. First, in any given market, radio stations can market and distinguish themselves to potential listeners through their identification with a particular format. These formats allow radio advertisers to target specific demographics much more precisely than they can when they advertise on television. In addition, viewers and listeners experience these two mediums differently. Television uses both sight and sound to allow advertisers to reach their audience in a relatively comprehensive way. As an audio medium, radio is more limited. As a result, radio and television broadcast distinct programming. Video is not suitable for radio and vice versa. The difference is important for viewers and advertisers alike.

380 The essential nature of each medium determines, in large measure, the type of programming each will broadcast 874 For example, a car dealership or furniture warehouse wishing to quickly create strong brand recognition will likely place greater value on television ads where potential customers see the products, as opposed to using radio ads. Radio listeners are seldom completely engaged to listening because simultaneously they are perhaps, driving, working, cleaning, dining, or shopping. Thus, some advertisers may prefer, while others avoid, the radio listener as a significant audience to target. Additionally, television advertisements typically are more expensive than radio ads,

⁸⁷⁰ See Clear Channel Comments in MM Docket No. 01-317 at 20-22, Exh. 6 at 5-8; Fox Comments, Owen Statement; see also NAB Comments in MM Docket No. 01-317 at 30-33. These comments were submitted in the local radio proceeding, and do not discuss the relevant product market for the radio/television cross-ownership rule.

⁸⁷¹ Silk, Klein, and Berndt, supra note 522.

⁸⁷² Reid and King, supra note 523.

⁸⁷³ Country, Jazz, urban, pop, and rock are examples of these radio formats

⁸⁷⁴ MOWG Study No 3 studies a number of different specifications for consumers of TV and radio and finds either weak or no substitution between these two media.

suggesting that advertisers could not easily switch between the two mediums. Recent data suggest that an average 30 second evening television spot costs approximately \$19 per thousand viewers, while on radio, the same spot costs approximately \$11 stations typically do not garner the size audiences that television stations do, thus, making the 30 second television spot considerably more expensive than a radio spot Small-scale, local establishments likely will find radio to be more affordable.

381 In sum, television and radio stations neither compete in the same product market nor do they bear any vertical relation to one another. A television-radio combination, therefore, cannot adversely affect competition in any relevant product market. Accordingly, we cannot conclude that the current television-radio cross-ownership rule is necessary to promote competition.

b. Localism

382 In the *Notice*, we sought comment on how cross-ownership limitations affect localism, as measured by the quantity and quality of news and public affairs programming that stations provide to local communities. We sought comment on the quantities of local news and public affairs programming provided by radio and television combinations as opposed to stand-alone stations in the same markets. We asked whether radio and television combinations produce more, less, or the same amount of news programming than stand-alone stations. We also asked commenters to address the implications of any such differences. We find that by prohibiting combinations of news gathering resources between radio and television stations, the current rule prohibits owners from maximizing local news and information production, which would benefit consumers.

383. There is no compelling or substantial evidence in the record that the rule is necessary to protect localism. The record in this proceeding, in fact, includes evidence to the contrary – that efficiencies and cost savings realized from joint ownership may allow radio and television stations to offer more news reporting generally, and more local news reporting specifically, than otherwise may be possible. The record in this proceeding suggests that station owners will use additional revenue and resource savings from television-radio combinations to provide new and innovative programming, provide more in-depth local interest programming, and provide better service to the public, including locally oriented services. As discussed in the Diversity Index section, consumers rely on both radio and television for coverage of news and public affairs. Therefore, consumers will benefit from a policy which allows radio and television owners to maximize these offerings.

384. Some commenters assert that independent owners expend more resources to air local

⁸⁷⁵ Data represent average cost per thousand viewers or listeners during prime time for third quarter, 2002. Source of data is SQAD For explanation of SQAD data see note 736, *supra*

⁸⁷⁶ Generally we identify both the product and the geographic markets. Because we find that radio and television advertising are separate product markets, it is not necessary to define the geographic market for these purposes

⁸⁷⁷ Notice, 17 FCC Rcd at 18537 ¶ 103.

Duhamel Comments at 1, 6, see generally, Clear Channel Comments in MM Docket No. 01-317 at 23, Cumulus Comments in MM Docket No. 01-317 at 5-6, Viacom Comments in MM Docket No. 01-317 at 62-64; NAB Comments in MM Docket No. 01-317 at 43-45

⁸⁷⁹ MOWG Study No 8, see also Diversity Index, Section VI(C)(3), infra

programming or produce more news and public affairs programming than do owners of combined stations. Further, some commenters contend that cross-ownership of radio and television stations in local markets leads to reduced independent news and public affairs programming, more syndicated programming, set reductions of staff, cross-assigned journalists, re-use and re-purposing of content, and increased amounts of on-air advertising time. 882

These parties have failed to show that the rule remains necessary in the public interest First, isolated anecdotes of changes in news programming schedules following a transaction do not provide the kind of systematic empirical evidence necessary to support a general allegation that cross-owned stations produce lesser quantities of news, or news of lower quality, than do non-cross-owned stations. Second, shared support staff and conservation of resources does not necessarily mean a reduction in local news. The efficiencies derived from some of these practices may in fact, increase the amount of diverse, competitive news and local information available to the public. Thus, the record does not demonstrate that the current rule specifically promotes localism, or that elimination of the rule would harm it.

c. Diversity

386. We asked in the *Notice* whether the cross-ownership rule is necessary to foster viewpoint diversity in today's media marketplace. We sought comment on the types of media that contribute to viewpoint diversity and how the cross-ownership rule affects viewpoint diversity. We noted that the current rule counts as a media voice commercial and non-commercial broadcast television and radio stations, certain daily newspapers, and cable systems. We asked whether additional types of media should also be counted as contributing to viewpoint diversity, such as the Internet, DBS, cable

WCC Comments at 40-41 UCC points to Clear Channel's 2002 acquisition of the Ackerley Group, in which Clear Channel acquired 16 television stations, and created new radio and television combinations in eleven communities. Post-merger, UCC argues that in Watertown, New York, Clear Channel replaced the television station's morning, noon and weekend news broadcasts with a morning news show produced in Birmingham UCC also complains that Clear Channel replaced its local news telecasts on stations in Binghampton and Utica with regional news programs. However, without additional information, it is impossible to evaluate the actual reasons for the programming changes or effect of the changes on the aggregate news programming produced and distributed by the Clear Channel stations in the market.

AFTRA Comments in MM Docket No 01-317 at 12. AFTRA believes that syndicated programming does not serve the interests of local communities. See also AFTRA Comments at 12-15 regarding the sharing of news product between different local outlets

⁸⁸² Id at 5-8 AFTRA cites CBS/Infinity's acquisition of Group W/Westinghouse, which resulted in the cross-ownership of television and radio stations in the Chicago market AFTRA states that CBS proposes to cross-assign news reporters for television and its seven radio stations

We received substantially more comments on this issue in the context of the newspaper/broadcast cross-ownership rule. There, the record suggests that the newspaper/broadcast cross-ownership rule impedes efficiencies that might otherwise benefit the public. We believe that the same is true in the context of radio and television combinations.

⁸⁸⁴ *Notice*, 17 FCC Rcd at 18536 ¶ 100.

⁸⁸⁵ *Id* at 18536-37 ¶ 102.

overbuilders, individual cable networks, magazines, and weekly newspapers

387. As discussed above, in today's media market there are more media outlets than ever before 886 The Commission has previously concluded that "the information market relevant to diversity includes not only television and radio outlets, but cable, other video media and numerous print media as well." Not only have we seen an increase in the types of outlets available, but local markets have also experienced enormous growth in broadcast outlets. The record shows that in local broadcast markets of all sizes the numbers of radio and television stations have increased over the years. 888

as 88 We conclude that the current television/radio cross-ownership rule is not necessary to ensure viewpoint diversity. As CanWest explains, we should not view specific markets in a vacuum for diversity purposes, but rather should consider that households get information from many sources. 889 Thus, we agree with the commenters that argue that a cross-ownership rule applicable only to radio and television is "inequitable and outdated" Although several commenters argue that retention of the radio/television cross-ownership rule is necessary to protect the availability of diverse views, information, and local programming, 891 we believe that a rule limited to just radio and television fails to take into account all of the other relevant media in local markets available to consumers.

389 We agree with the commenters, however, that fostering the availability of diverse viewpoints remains an important policy goal, and that diversity of ownership promotes diversity of viewpoints. We are adopting modified service-specific local ownership rules that will protect and promote competition in the local television and radio markets and, as a result, will also protect and preserve viewpoint diversity within those services. In addition, we are adopting a new cross-media limit rule, described below, that is specifically designed to protect diversity of viewpoint in those markets in which we believe consolidation of media ownership could jeopardize such diversity. The local rules we are adopting in this *Order* are designed to reflect the substantial growth and availability of media outlets in local markets, and to account for concentration among all media outlets that substantially contribute to the dissemination of diverse and antagonistic viewpoints in local markets. These rules make a rule

⁸⁸⁶ See Media Marketplace, Section IV, supra

⁸⁸⁷ See 1984 Multiple Ownership Report and Order, 100 F C C 2d at 25; See Viacom's Petition for Rulemaking (May 23, 2002) at 7, Clear Channel Comments at 5; NAB Comments at 68, Fox Comments at 58

⁸⁸⁸ See Media Marketplace, Section IV, supra, MOWG Study No 1

⁸⁸⁹ CanWest Comments at 3 CanWest notes that cross-ownership in Canada has strengthened media companies and has encouraged greater diversity and more sources of information. *Id.* at 6

⁸⁹⁰ See, e.g., NAB Comments at 69-70

⁸⁹¹ Desmond Reply Comments at 7; AFTRA Comments at 10-11; CWA Comments at 2-3, 46; Nancy Stapleton Comments at 10-11, 16, see also Children Now Comments at 3-4 (if the Commission relaxes the cross-ownership rule, it should analyze the impact of proposed media mergers on children).

⁸⁹² MOWG Study No. 8 shows that consumers use a wide variety of media to obtain entertainment, news and information, and that the general public views all of these sources as substitutes. MOWG Study No. 3 shows consumers' increased use of the Internet at work and at home. Internet use has increased from 15% in 1997 to 46% in 2000 *Id* at Table 7. The UCLA Internet Report suggests that over the past three years a significant number of Internet users have been substituting away from television, getting more news and entertainment online "The UCLA Internet Report Surveying the Digital Future, Year Three," UCLA Center for (continued .)

directed only at radio and television unnecessary and anachronistic.

d. Conclusion

390 We do not have evidence in the record sufficient to support retention of the current radio/television cross-ownership rule. From a competitive perspective, radio and television are not good substitutes for the same revenue producing opportunities, and thus, cannot be regarded as competing in the same product market. There is little evidence that the current rule promotes localism and, to the contrary, the record indicates that combined station groups may be able to achieve cost savings that may accrue to the benefit of listeners and viewers. Finally, radio and television stations compete with many other electronic and print media in providing programming and information to the public, and the targeted cross-media limits adopted herein are therefore better designed to achieve our diversity goal in markets where diversity could be jeopardized by cross-ownership than the stand-alone radio/television cross-ownership rule. In addition, our local television and local radio ownership rules, which are designed to preserve competition in those markets, will also foster diversity of voices. We turn next to a discussion of the Diversity Index, which is intended to help us analyze outlets that contribute to viewpoint diversity in local markets.

3. The Diversity Index⁸⁹³

391. In order to provide our media ownership framework with an empirical footing, we have developed a method for analyzing and measuring the availability of outlets that contribute to viewpoint diversity in local media markets. The measure we are using, the Diversity Index or DI, accounts for certain, but not all media outlets (newspapers, broadcast, television, radio, and the Internet) in local markets available to consumers, the relative importance of these media as a source of local news, and ownership concentration across these media. The DI builds on our previous approach to the diversity goal. We retain the principle that structural regulation is an appropriate and effective alternative to direct content regulation; we retain the principle that viewpoint diversity is fostered when there are multiple independently-owned media outlets in a market, we retain our emphasis on the citizen/viewer/listener and on ensuring that viewpoint proponents have opportunities to reach the citizen/viewer/listener. What we add is a method, based on citizen/viewer/listener behavior, of characterizing the structure of the "market" for viewpoint diversity. We use the DI as a tool to inform our judgments about the need for ownership limits. This section explains the rationale for the diversity index and discusses calculation methodology. The DI is based partly on the results of a consumer survey, which we acknowledge is not without flaws, and partly on our expert judgment and analysis of the local viewpoint diversity marketplace. While the Diversity Index is not perfect, nor absolutely precise, it is certainly a useful tool to inform our judgment and decision-making. It provides us with guidance, informing us about the marketplace and giving us a sense of relative weights of different media. It informs, but does not replace, our judgment in establishing rules of general applicability that determine where we should draw lines between diverse and concentrated markets.

392 Because of the limitations in the Nielsen survey, and the specific assumptions underlying (Continued from previous page)

Communication Policy (Feb 2003) at 33. See also CanWest Comments at 6, CST Comments at 5-7; Paxson Comments at 34-35. No commenters argue that a diversity analysis should be limited strictly to radio and television programming

The Commission wishes to recognize some of its economists for their efforts in developing this index including. Thomas Spavins, Enforcement Bureau, Judith Herman, Media Bureau, and John Scott, Media Bureau.

the DI, it is a useful tool only in the aggregate. It cannot, and will not, be applied by the Commission to measure diversity in specific markets. Indeed, it could not be used on a particularized basis to review the diversity available in a specific market. For example, in determining the appropriate weights to apply to the various media, we have decided to give no weight to cable television or magazines as sources of local news, notwithstanding the results in the Nielsen survey to the contrary. We recognize that consumers in certain markets do have access to local news from local magazines, local cable news channels, and PEG channels, but we believe that the Nielsen survey overstates this influence. On a national basis, we believe most consumers either do not have access to such sources (such as a local news magazine) or rely very little on them (such as PEG channels). Similarly, the DI assumes each town has only one weekly newspaper. In the aggregate, the DI reflects the market situation of most communities. In sum, excluding these sources or factors from the DI does not undermine the general conclusions we reach about market concentration because the DI is not capable of capturing particularized market characteristics; it is intended to capture generalized, typical market structures and identify trends.

a. Rationale for the Diversity Index

As discussed above, fostering diversity is one of the principal goals of the Commission's media broadcast ownership rules. In the past, the Commission has described its diversity goal as fostering "competition in the marketplace of ideas". Although the analogy between economic competition and diversity is not perfect, it is of use in structuring our approach. Viewpoint diversity refers to availability of a wide range of information and political perspectives on important issues. Information and political viewpoints are crucial inputs that help citizens discharge the obligations of citizenship in a democracy. We recognize that the number of political viewpoints or the number of perspectives on a particular issue may be greater than the number of media outlets in a market. And we recognize that, in an effort to cater to viewer/listener/reader preferences any single outlet may choose to present multiple viewpoints on an issue. However, we do not expect every outlet to present every perspective on every issue. The competition analogy suggests that having multiple independent decision-makers (i.e., owners of media outlets) ensures that a wide range of viewpoints will be made available in the marketplace.

News and public affairs programming is the clearest example of programming that can provide viewpoint diversity. As discussed above, we regard viewpoint diversity to be at the core of our public interest responsibility, and recognize that it is a product that can be delivered by multiple media. Hence, in contrast to our competition-based rules, diversity issues require cross-media analysis. Because what ultimately matters here is the range of choices available to the public, we believe that the appropriate geographic market for viewpoint diversity is local, *i.e.*, people generally have access to only media available in their home market. To assist in our analysis of existing media diversity, and to help us determine whether any cross-media restrictions are necessary in the public interest, we use a summary index that reflects the general or overall structure of the market for diverse viewpoints. By analogy with competition analysis, the diversity index is inspired by the Herfindahl-Hirschmann Index (HHI)

⁸⁹⁴ See our discussion excluding magazines and cable television in subsection, Choice of Media, Section VI(C)(3)(b), infra.

⁸⁹⁵ See the discussion of the local radio and local television rules, Section VI(A) and (B), wherein we conclude that radio and television advertising markets are separate and that consumers of programming do not see radio and television as close substitutes.

⁸⁹⁶ See 1984 Multiple Ownership Report and Order, 100 F.C.C 2d at 24-25 ¶ 24, Notice, 17 FCC Rcd at 18546 ¶ 136

formulation, calculating the sum of squared market shares of relevant providers in each local market.

395 The measurement of market concentration has a long history in economics and several different measures have been proposed in the economics literature. For example, a simple count of the number of firms in an industry (as the Commission has previously done in the media industry), the four-firm concentration ratio (measuring the percentage of the market held by the top four companies), and the HHI have all been ascendant at various times. The HHI measure, however, is particularly attractive for two reasons.

396 First, its mathematical properties correspond to our beliefs about the effects a merger would cause. Each possible measure of market concentration has benefits and weakness that can be captured by the list of mathematical properties, or axioms, that that particular measure satisfies.⁸⁹⁸ In the case of measuring market concentration, a list of reasonable requirements or axioms limit us to the choice of few mathematical formulas.⁸⁹⁹ Within this class of admissible indices, the HHI can be thought of as a very conservative choice in the following sense If we ask "what is the loss of competition from a merger," known as the "delta" in the antitrust field, the HHI measure reflects the assumptions that: (i) an acquisition of a firm with given size will lead to a larger harm the larger the acquiring firm, and (ii) this harm is proportional to the size of both the merging parties. Applying a similar analysis to the Diversity Index, the Index reflects the assumptions that if newspapers have twice the diversity importance of television, a newspaper's acquisition of a broadcast television station will cause twice the loss of diversity as will a merger of two broadcast television stations. Conversely, if radio has less diversity weight than television, then a merger of a television and a radio station will cause less of a loss of diversity than will a merger of two television stations. In contrast, if the Commission were to adopt a simple "voice test," for example, then it would be assuming that the loss of voice due to a merger is independent of the diversity importance of either party. Similarly, if the Commission were to adopt a concentration ratio measure, then it would implicitly be assuming that the loss of diversity is independent of the size of the larger firm in the transaction. It is in this sense -- that the size of the diversity loss increases as does the diversity importance of either merging party - that the Diversity Index developed here is a conservative measure, and one which we adopt in the interest of prudence.

397. Moreover, the HHI, from which our chosen measure derives, is widely used in economics and in antitrust. Thus, we can draw on our experience with the HHI in competition policy to determine threshold values for the Diversity Index. Indeed, the HHI formula is already widely used in the diversity literature for measuring content diversity.

⁸⁹⁷ For an overview of this literature see, e.g., Jean Tirole, Theory of Industrial Org. (MIT Press 1993) at 221-23, Michael Waterson, Economic Theory of the Industry. (Cambridge Univ. Press 1984) at 166-74

A requirement placed on an index is known in mathematics as an axiom. When we can show that there is a unique mathematical function that satisfies a given list of axioms, then that function is said to be *characterized* by the list of axioms. For a classic exposition of the axiomatic approach see J. Aczel, LECTURES ON FUNCTIONAL EQUATIONS AND THEIR APPLICATIONS (Academic Press 1966)

The axioms are presented in David Encaoua and Alexis Jacquemin, Degree of Monopoly, Indices of Concentration and the Threat of Entry, 21 INT'L ECON. REV. 87-105 (1980). Their list includes axioms such as, the value of an index should increase when two firms merge and decrease when a new firm enters.

⁹⁰⁰ The literature using the HHI to measure content diversity goes back to at least 1979. See Barry Litman, The Television Networks, Competition and Program Diversity, 23 J OF B'CASTING 393-409 (1979).

- We assign market shares to these providers based in part on the results of responses to the Nielsen survey described in MOWG Study No. 8 The Diversity Index itself, however, is a blunt tool capable only of capturing and measuring large effects or trends in typical markets. Thus, the DI change from a particular transaction in a particular market might be more or less than we anticipate, or that it might result in a market DI higher or lower than that suggested by our examples. This is of no moment as the DI is a tool useful only in the aggregate and will not and cannot in its current form be applied on a particularized basis.
- 399. There are several conservative assumptions in our analysis of viewpoint concentration. First, we premise our analysis on people's actual usage patterns across media today. Fox reasonably argues that the Commission should set ownership limits based on the availability of news sources irrespective of their particular usage rates by consumers.⁹⁰¹ The record contains evidence that most people can and do substitute among different media for news and information. 902 Nonetheless, our method for measuring viewpoint diversity weights outlets based on the way people actually use them rather than what is actually available as a local news source. We adopt this approach out of an abundance of caution because we are protecting our core policy objective of viewpoint diversity. Second, our diversity analysis is based on preserving viewpoint diversity among local, not national, news sources. The effect is that we exclude, for purposes of measuring viewpoint concentration, the large number of national news sources such as all-news cable channels and news sources on the Internet and instead focus exclusively on the smaller set of outlets that people rely on for local news. Excluding those national sources thus leaves us with a smaller set of 'market participants' that we regulate to protect local news diversity in a way that might be unnecessary to protect diversity among national news sources. Third, we do not include low power television and low power radio stations in measuring viewpoint diversity. These stations are often operated with the express purpose of serving niche audiences with ethnic or political content that larger media outlets do not address. These low power outlets promote viewpoint diversity in a way that we have not addressed because of their more limited reach, but collectively they enhance viewpoint diversity beyond the levels that are reflected in our Diversity Index measurements.
- 400 We conclude that each of these judgments that inform our viewpoint diversity analysis are sound, but in each case we make the most conservative assumption possible. Thus, the results of our diversity index analysis can fairly be said to understate the true level of viewpoint diversity in any given market.

b. Choice of Media

401. We have determined which media to include in the Diversity Index based on the survey information derived from the "Consumer Survey on Media Usage" prepared by Nielsen Media Research (FCC MOWG Study No. 8). This survey tells us how consumers perceive the various media as sources of news and information. The key threshold implication of this study is that consumers use multiple media as sources of news and current affairs, and hence that different media can be substitutes in providing viewpoint diversity. For example, consider a citizen who acquires local news from television, newspapers, and radio. Suppose that a group of citizens in the consumer's home town wishes to oppose a bond issue for a new sports stadium, and that the local newspaper and television stations favor the bond issue and choose not to cover the position of opponents. If the opponents nevertheless get radio coverage

⁹⁰¹ Fox Comments at 59.

⁹⁰² MOWG Study No 3 at 80

for their position, they would be able to reach this particular citizen. Indeed, one might think that part of the radio coverage might address the fact that other media are "ignoring" the story. This could then raise the profile of the story to a level that might attract newspaper or television coverage. We put forward this hypothetical sequence of events not because we think that it describes a process that will happen with respect to any particular controversy. Rather it is a useful illustration of the process by which markets with multiple independent media outlet owners operate, particularly in an environment in which citizens generally do not depend on a single medium for their local news and current affairs.

402. FCC MOWG Study No. 8 asked respondents to identify the sources, if any, "used in the past 7 days for local news and current affairs." The same question was posed for national news and current affairs. The choices offered were television, newspaper, radio, Internet, magazines, friends/family, other, none, don't know, and refuse. The survey then asked follow-up questions regarding the first five choices. For each one of the five sources, respondents who did not mention a source were asked specifically if they used that source for local news and current affairs. The survey posed analogous questions with regard to national news and current affairs. Based on the initial and follow-up questions, the survey presents "summary data" on sources of local and of national news and current affairs information.

403 In an ex parte communication filed May 28, 2003, Media General submitted a critique of MOWG Study No. 8 by Prof. Jerry A. Hausman. Hausman argues that the Nielsen Survey has a number of serious flaws and questions its usefulness in any rule-making concerning cross-ownership of newspapers and broadcast stations. First, he claims that the low response rate of the survey may lead to biased results. Second, he argues that survey questions about hypothetical future circumstances are unreliable. He cites a number of cases where respondents, presented with relatively simple questions, are unlikely to consider the full, complete implications if a particular form of media were to become unavailable Third, he argues that the survey asks no questions that address the newspaper/broadcast cross-ownership issues.

404. We recognize Professor Hausman's concerns, but we believe that the Nielsen survey sample of 3,136 households provides us with useful information. In addition, Professor Hausman provides no evidence that the sample is, in fact, biased. Concerning Hausman's second point, we agree that answers to hypothetical questions are less useful than information about actual behavior. MOWG Study No 8 provides a substantial amount of information on reported actual behavior. It is this information, not the hypotheticals, on which we rely to conclude that media can be substitutes in providing viewpoint diversity and to construct our Diversity Index. Regarding Hausman's third point, although the Nielsen survey may not directly ask respondents for their views concerning specific cross-

⁹⁰³ Statement by Jerry Hausman, Media General Notification of Ex Parte Communication (May 28, 2003)

See Hausman at 3.

For example, he cites where the Nielsen survey asks whether respondents would be more likely to use cable or satellite news channels for news if broadcast TV channels were not available. He notes that the question does not ask the respondent to consider a number of important factors, such as whether VHF and UHF news programs would cease to exist or whether only cable and satellite news programs would remain. Since it is not clear what hypothetical world the respondents are assuming, Hausman argues, the results of the survey are not reliable. Hausman, at 4-5

⁹⁰⁶ Hausman at 6

ownership scenarios, we find that the results of the survey are useful in a number of areas, such as which forms of media are most heavily used for news. While questions could have been posed that contained more specificity concerning cross-ownership rules, we understand that such complexities could have made the survey design more difficult, as well as possibly lowered the response rate. Overall, while Hausman claims that the Nielsen survey does not "provide a basis for the measurements necessary for the specification of policy," the survey does, in fact, help us establish an "exchange rate" for converting newspaper, television, radio, and other media into common units so we can measure the extent of concentration in the "market of ideas" Finally, we emphasize that the Commission has not relied solely on the results of the Nielsen survey, but has used a number of studies and its own expert judgment on media in reaching its decision

405 The data in the Nielsen study indicate that television, newspapers, radio, Internet, and magazines are the leading sources of news and current affairs programming. Indeed, the summary data tables list only those five sources. In the initial questions, less than one percent of respondents cite "other" as a source Based on the initial question, the average respondent uses two of the five major sources for news and current affairs, whether the category is local or national. Taking account of the follow-up questions, the average respondent uses three of the five major sources for news and current affairs, again regardless of whether the category is national or local. These data strongly suggest that citizens do use multiple media as sources of viewpoint diversity, and that media can be viable substitutes for one another for the dissemination of news, information and viewpoint expression. On the basis of this finding, we proceed to an analysis of local media markets and whether there are particular kinds of crossmedia transactions in particular kinds of markets that would likely result in high levels of concentration. To assist in making that determination, we rely in part on our Diversity Index.

406. Our Diversity Index focuses on availability of sources of local news and current affairs. As we explained in our policy goals section above, we are concerned with promoting viewpoint diversity in local media markets. Owners of media outlets clearly have the ability to affect public discourse. Consumers have numerous sources of national news and information available to them. Three major commercial broadcast networks, ABC, NBC, and CBS, provide this material and are available to 98% of US television households 910 Several nonbroadcast networks also provide national news and current affairs information also are widely available. Subscribership to CNN is 77.4% of US television households 911 The comparable figures for Headline News, Fox News, MSNBC, and CNBC are 74.1%, 71.8%, 68.4%, and 74.9%, respectively. 912 Local newspapers generally provide information on national issues, and a variety of major newspapers have national footprints. They include USA Today, the Wall

⁹⁰⁷ Hausman at 3

⁹⁰⁸ MOWG Study No 8 at Tables 97 and 98.

⁹⁰⁹ The average respondent uses 2 93 different media for local and 2 71 different media for national news and current affairs

⁹¹⁰ See OPP Working Paper 37 at 48. In January 2002, there were 105.5 million television households in the U.S. See Television Advertising Bureau, Trends in Television at www tvb org.

⁹¹¹ See Kagan World Media, Cable Television Investor (July 29, 2002) at 14.

⁹¹² Id The total television households figure (105.5 million) is for January 2002 and is from Television Advertising Bureau, *Trends in Television* at www tvb.org.

Street Journal, the New York Times, and others. Moreover, a wide range of newspapers are available online at no charge National news magazines, such as <u>Time</u>, <u>Newsweek</u>, <u>US News and World Report</u>, and more specialized political journals, such as <u>Weekly Standard</u> and <u>New Republic</u> are also widely available ⁹¹³ Therefore we do not believe that governmental regulation is needed to preserve access to multiple sources of national news and public affairs information.

407 The Diversity Index incorporates information on respondents' usage of television, newspapers, radio, and the Internet. Respondents also reported getting local news and information from magazines. 914 We exclude magazines, however, from our Diversity Index. First, as the description above makes clear, most (but not all) news magazines have a national rather than a local focus. Although there are exceptions (e.g., the Washingtonian and Texas Monthly), the figures in MOWG Study No. 8 on magazines use appear to be overstated. This simplification and assumption is supported by other aspects of the study For example, unlike newspapers, radio, and television, almost no one cited magazines as their primary source of news and current affairs. MOWG Study No. 8 includes a question asking respondents to identify their single primary source of local or national news and current affairs. The figure for magazines is 0.6%. 915 A 2000 study by the Pew Research Center for the People and the Press provides similar results. 916 The study examines "Trends in Regular News Consumption" and finds that 12% of respondents, but only 4.2% of responses cite news magazines. An even lower share, 5% of respondents and 1.7% of responses, cite business magazines. Moreover, these figures include consumption of national as well as local news. The share of the sample utilizing magazines for local news is smaller, perhaps considerably so The Pew Center data support our inference that magazines play a negligible role overall as a source of local news. We must also note that, although the actual local news figure is small, because both the MOWG Study No. 8 and Pew Center figures combine local and national news, the precise magnitude of the local news figure is uncertain. Hence we are unable to assign to magazines a weight (even a small weight) in which we would have confidence. Nonetheless, the decision to exclude magazines will be re-examined in the next biennial review, and we will take the opportunity to gather additional survey data at that time on magazine usage.

408 For similar reasons, we also exclude cable from our Diversity Index. As discussed in the following section, we are concerned that some consumers may have confused broadcast and cable television. Thus, we believe some consumers who replied that they receive their local news from cable may have been viewing broadcast channels over the cable platform. We also recognize, however, that cable systems do provide local news and current affairs information through PEG channels and, in some markets, local news channels. However, we do not have accurate data for this measure. Because we do not have reliable data on this point, we exclude cable from the DI to simplify our general analysis. 917

⁹¹³ See Appendix B for a summary list of major national news sources. We note that some of the sources for national news and information are owned by the same companies but we continue to believe that consumers have numerous independently owned sources of national news and information

⁹¹⁴ Six percent of respondents answered that they received their local news and information from magazines.

⁹¹⁵ MOWG Study No. 8, Table 20.

⁹¹⁶ Pew Research Center for the People and the Press, *Internet Sapping Broadcast News Audience*, http://people-press.org/reports/display.php3?PageID=203.

As with magazines, we will review this issue in the next biennial review, and may collect at that time more accurate survey data on consumers' use of cable for local news and current affairs.

c. Weighting Different Media

- 409. We have concluded that various media are substitutes in providing viewpoint diversity, but we have no reason to believe that all media are of equal importance. Indeed the responses to the survey make it clear that some media are more important than others, suggesting a need to assign relative weights to the various media. In view of our focus on local news and current affairs, we choose to base our weights on survey responses to the question asking respondents to identify the sources, if any, "used in the past 7 days for local news and current affairs." We recognize that this is not a perfect measure, and that it requires some adjustment. We justify these adjustments and assumptions, however, by emphasizing that we are using the DI only to inform us of general market trends, not for precise measurements.
- 410 As noted above, the average respondent uses three different media for local news and current affairs information. It is likely that, for a given respondent, the three are not all of equal importance. If media differ in importance systematically across respondents (e.g., if television were most important to everyone, and everyone made only minor use of radio to acquire news and current affairs information), then it would be misleading to weight all responses equally.
- 411 Unfortunately, we do not have data on this question specifically with regard to local news and current affairs. The available "primary source" data address local and national news together and do show that different media have different importance, in the sense that primary usage differs across media ⁹¹⁹ Because "primary source" data are not available for local news and current affairs alone, we use the data identifying sources of local news and public affairs programming to weight the various media to reflect relative usage. As noted below, this leads to lower shares for television and higher shares for radio than the "primary source" shares reflect.
- 412. The local response summary data, Table 97 of MOWG Study No. 8, include five categories of media—Internet, magazines, radio, newspaper, television. Magazines account for 6 8% of responses to the questions on source of local news and current affairs. We exclude magazines as explained above and normalize the shares of the four remaining media to sum to 100%. The resulting weights are television (33 8%), newspapers (28 8%), radio (24.9%), and Internet (12.5%). The local response summary data do not break down the television responses between broadcast television and cable/satellite television. Nor do these data separate out usage of daily and weekly newspapers. We make use of other FCC MOWG Study No. 8 questions to apportion the newspaper shares further.
- 413. Although the responses to one question in MOWG Study No. 8 suggests that cable is a significant source of local news and current affairs, other data from the study casts some doubt on this result. The following discussion explains the reasoning that leads us to exclude cable/satellite television from the current analysis of local news and current affairs for diversity purposes. As a threshold matter, DBS currently provides little or no local nonbroadcast content. We do, however, recognize that cable provides some such content and that it is becoming a more important source of local news and

⁹¹⁸ MOWG Study No. 8, Table 97

⁹¹⁹ Id, Table 20.

⁹²⁰ The "primary use" weights, excluding magazines, are television (57 8%), newspapers (25.8%), radio (10 3%), and Internet (6 1%) When magazines are included their weight is 0 6%. *Id*.

information Some markets do have commercial local news channels on cable. Moreover, at least one national cable news service (CNN Headline News) provides a five-minute local "cut-in" every half hour in some markets. Additionally, local public, educational, and governmental ("PEG") channels provide some local news and information, although the extent of their impact is unclear. MOWG Study No. 8 asked respondents who get local news and current affairs from television (table 8) to indicate if the source is "broadcast television channels," cable or satellite news channels," "some other channel," "don't know," or "refuse" Virtually all responses fell into the first two categories, with 46.4% of respondents who get local news from television identifying cable as their source.

414 Our experience suggests that the local cable news response is too high. A review of the responses reported in tables 6, 16, and 18 of MOWG Study No. 8 support this assumption. Table 18 provides responses from all who get news (local or national) from cable to the question "what are the names of the news channels you watched in the past 7 days on cable or satellite for local or national news or current affairs?" The list from which respondents can choose includes CNN, Fox News Channel, MSNBC, Local Cable News Channels, Headline News, CNBC, Other, Don't Know, and Refuse. The last two choices get minimal response, but 27.5% of responses are "Other." This suggests that some people may be counting retransmitted broadcast signals on cable or satellite as cable or satellite channels. 923 Moreover, joint examination of the responses reported in tables 6, 16, and 18 make it possible to infer that 94 3% of those who get news from cable (the table 18 universe) claim to get at least some local news from cable. However, only 6 1% of responses mention local cable news channels. 924 This disparity makes us question the responses regarding local news via cable and satellite channels and supports our conclusion that weighting cable 46.4% is too high. An additional reason that leads us to question cable as a local news source is that, of those local cable channels that meet Nielsen's minimum reporting standards, they are the least watched of any broadcast or cable stations in the market. 925 Given the low viewing of PEG channels and the facts that only one-third of cable subscribers have access to a local cable news channel and we do not have an accurate cable figure to use, we believe excluding cable from the Diversity Index on a national basis is a reasonable assumption. We will review the status of cable as a local news provider in the 2004 biennial review. Our review will include a follow-up to MOWG Study No. 8, which will include more detailed questions regarding the use of nonbroadcast video media for local news and current affairs.

Roughly one-third of cable subscribers, 22 3 million, had access to a local or regional news channel in July 2002. See OPP Working Paper 37 at 126.

The corresponding figure for national news (from table 16) is 51.1 percent.

⁹²³ Because all cable systems carry local broadcast stations pursuant to our signal carriage rules, and because DBS carriers provide local broadcast signals in many markets, also pursuant to our signal carriage rules, it is possible, even likely, that the "other" category actually reflects viewing of retransmitted broadcast signals. If we assume that viewers are likely to be familiar with local broadcast signals, it is not likely that the "don't know" category includes broadcast signal viewing.

⁹²⁴ Local cable news channels are, unlike the Internet, not available everywhere, but only in select markets. Only approximately one-third of cable subscribers have access to such channels. See OPP Working Paper 37 at 126 The ownership limits apply nationwide, and the diversity index is intended to help us define these ownership limits. This was an additional reason for excluding cable from the DI while counting the Internet.

⁹²⁵ Nielsen Television Index (Nov. 2000)

- 415. With regard to newspapers, MOWG Study No. 8 indicates that 61.5% of those who cite newspapers as a source of local news and current affairs acquire that information from dailies only, 10.2% from local weeklies only, and 27.3% from both. This works out to a share of 70.3% daily and 29.7% weeklies. We use these weights to divide the total newspaper share (28.8%) among daily and weekly newspapers. Our next biennial review will provide an opportunity for re-examination of the role of weekly newspapers. Accounting for the additional information on newspapers results in a revised set of weights. They are: broadcast television 33.8%, daily newspapers 20.2%, weekly newspapers 8.6%, radio 24.9%, and Internet 12.5%
- 416 Various commenters agree that MOWG Study No. 8 supports the conclusion that citizens do, in fact, see different media as alternative sources of news. For example, NAA opines that the study, "a comprehensive survey ... shows that the public makes ample use of a broad assortment of outlets" and that it "demonstrates that the public relies heavily on a range of alternative media." Fox opines that the study "demonstrates that consumers are utilizing the wide variety of media available to them to obtain both local and national news and information." Later, this commenter states that this study, along with another study discussed in the comments "demonstrates that consumers are adept both at using various sources to obtain information and at using multiple sources simultaneously."928 Critics of MOWG Study No. 8 include AFL-CIO and AFTRA, both of whom rely on a paper by Baker, attached to the AFL-CIO comments 929 The Baker submission refers to the fact that MOWG Study No. 8 reports responses to a number of hypothetical questions regarding how respondents would behave if the availability to them of certain media were to change Baker observes that the study "looks at what people say they will do" and goes on to assert that "[E]conomists usually prefer looking at what people do." We agree that answers to hypothetical questions are less useful than information about actual behavior. MOWG Study No. 8 provides a substantial amount of information on reported actual behavior. It is this information, not the hypotheticals, on which we rely to conclude that media can be substitutes in providing viewpoint diversity and to construct our Diversity Index. It is worth noting in this connection that much of the information we have on radio listening and television viewing is also based on reports by listeners and viewers of their behavior Moreover, the information in MOWG Study No. 8 on the range of media that citizens use for news and information is quite similar to the results of a recent independent survey by the Pew Research Center. 931
- The most detailed analysis of MOWG Study No. 8 comes from the Consumer Federation of America. Their comments refer to the "two dominant political media—daily newspapers and television," although CFA asserts that these

⁹²⁶ MOWG Study No 8, Table 7.

⁹²⁷ NAA Comments at 8

⁹²⁸ Fox Comments at 11, 25

⁹²⁹ See AFL-CIO Comments at 12 and Baker Study at 12-14; AFTRA Comments at 8

⁹³⁰ Baker Study at 14.

⁹³¹ Pew Research Center for the People and the Press, Sources for Campaign News, Fewer Turn to Broadcast TV and Papers, (Apr 27, 2003) at http://people-press.org/reports/display.php3?PageID=243.

⁹³² See generally CFA Comments at 94-147

media "appear to play very different roles." As noted above, television has the largest weight in the DI (33.8%) and daily newspapers also loom large at 20.2%. Although the radio weight is somewhat higher at 24.9%, the fact that markets generally have far more radio stations than daily newspapers make our weights consistent with CFA's conclusion that newspapers are among the two most influential media. CFA finds that the Internet plays a small but growing role in citizen acquisition of news and information, a finding not inconsistent with the relatively low weight of Internet in our DI. CFA quotes statistics on daily use of television, newspapers, radio, and Internet that yield usage shares not too different from our DI weights Drawing on two surveys, CFA suggests that people spend 4 minutes per day on average gathering news from the Internet, 25 minutes reading newspapers, 15 minutes listening to radio news, and "over half an hour" watching television news. Ascribing half an hour to television leads to shares of 40.5% for television, 33.8% for newspapers, 20.3% for radio, and 5.4% for Internet. These are fairly close to our DI weights of 33.8%, 28.8%, 24.9%, and 12.5% for television, newspapers, radio, and Internet, respectively.

418. Although CFA does not dispute the proposition that different media address the same issues and stories, it asserts that they do so in different ways, suggesting, *inter alia*, that television is "the primary source for breaking news," that newspapers have a larger role in "the follow-up function," and that talk shows are a new and significant element of radio's role in disseminating viewpoints. Although CFA does not discuss the role of radio as a source of breaking news, we acknowledge that different media do present information in different ways. CFA also argues that, particularly for "high use respondents" (the one-third of respondents in MOWG Study No. 8 whose total media use was above the sample average) there is evidence that the media are complements rather than substitutes, *i.e.*, people who use more of one medium tend to use more of the others. For the "low use respondents" (the one-half of respondents whose total media use was below the sample median), in many cases there are negative correlations in usage across many pairs of media. CFA suggests that this is consistent with substitution. Thus, CFA appears to conclude that media are substitutes for some citizens and complements for others.

419 We disagree with CFA's conclusion that the DI is invalid because some citizens may consider certain media outlets complements rather than substitutes. In the technical economic sense, two goods are substitutes if an increase in the price of good A (which leads to a decrease in consumption of good A) leads to an increase in the consumption of good B. In the context of our diversity goal, we are concerned with the question of what happens when one or more media outlets refuses to transmit a particular viewpoint. If most citizens accessed only one type of outlet, e.g., radio but not newspapers or television, then our diversity goal would prompt us to analyze separately the structure of the "radio marketplace of ideas." If, on the other hand, most citizens access multiple media, then we can rely on the reasonable probability that, if, e.g., the local newspaper refused to cover a particular story, citizens would be exposed to that story via independently-owned other media, such as radio or television. In other words, evidence that media are complements in the sense that, for at least some citizens, there is a positive correlation between use of one medium and use of another, does not invalidate the premise underlying the DI.

⁹³³ Id at 109

⁹³⁴ Id at 112, 100

⁹³⁵ Id at 142-145.

d. Weighting Outlets Within the Same Medium

- Having decided on relative weights for the various media, we next confront whether and how to weight different media outlets within each category. The decision of whether to do weighting turns on whether our focus is on the availability of outlets as a measure of potential voices or whether it is on usage (ie), which outlets are currently being used by consumers for news and information). We have chosen the availability measure, which is implemented by counting the number of independent outlets available for a particular medium and assuming that all outlets within a medium have equal shares. In the context of evaluating viewpoint diversity, this approach reflects a measure of the likelihood that some particular viewpoint might be censored or foreclosed, ie, blocked from transmission to the public.
- 421. The underlying assumption here is that all outlets have at least similar technical coverage characteristics. This is a good, but not perfectly accurate assumption. Our signal carriage rules more or less equalize the coverage of all television stations in a particular DMA, and it appears that newspapers (even those with limited current circulation) can expand their circulation area at relatively low cost. That is, assuming that additional readers are interested in the content, additional delivery personnel and vending machines are readily available at low cost. However, the assumption is less certain for radio. For example, a Class C FM station and a daytime AM station, in fact, have different coverage characteristics. The Class A station cannot expand its coverage to match that of the Class C FM station and thus reach additional listeners who might otherwise not have access to the views expressed on this outlet. Nevertheless, we believe the assumption to be reasonable across all cases. Arbitron radio metros are smaller than many radio station service areas and so would have the effect of truncating the service areas of more powerful stations. In addition, even though radio's total diversity share is 24.9%, on average there are enough radio stations so that the per-station share is fairly small. Any distortion in share by overestimating the reach of small radio stations is therefore small.
- 422. Even though we choose to assign the same weight to each outlet of a particular medium, we reiterate the importance of assigning different weights to different media. As noted above in \P 409 et seq, different media are of different importance. The differences in usage across media documented in MOWG Study No. 8 are in part reflections of the differential impact on the user of television, radio, newspapers, etc. We believe that the overall impact of a medium is substantially determined by the physical attributes of its distribution technology, along with user preferences. A radio station owner is able to change format, say from classic rock to all-news, and thus change its impact on the marketplace of ideas. But a radio station switching to all-news does not thereby turn itself into the equivalent of a television station nor does its impact on the marketplace of ideas become that of a television station. Conversely, if a home shopping television station began to carry substantial local news programming, the impact on the marketplace of ideas would be greater than that of the former classic rock radio station.
- 423. The case for a usage measure is that it reflects actual behavior. However, current behavior is not necessarily an accurate predictor of future behavior. Moreover, in order to implement a usage measure accurately, it would be necessary for us to define which content should be considered local news and current affairs. Current behavior, e.g, viewing or listening to a broadcast station, is based on the content provided by the station in question. However, media outlets can change the amount of news and current affairs that they offer, perhaps in response to competitive conditions in the "viewpoint diversity"

⁹³⁶ We make this assumption for the purposes of constructing the DI; the actual differences in coverage are accounted for in the rules themselves, e.g., the UHF discount in the national rule, and our waiver policy in the local TV and CML rules will look to the actual reach of stations.

marketplace Such changes are unpredictable, so current market shares (e.g., of viewing or listening) may not be good predictors of future behavior. Indeed, advocates of a concentration approach to diversity analysis have noted the weakness of the usage approach, pointing out that "[E]vidence of past production does not, as a matter of logic, necessarily give a proper picture of a company's future ability to compete.' Only in examining 'its structure, history and probably future, does one provide' the appropriate setting for judging the probably anticompetitive effect of the merger'" ⁹³⁷ This point has particular force when dealing with competition in the marketplace of ideas because media outlets can rapidly expand their distribution of content (including local news and current affairs) at very low marginal cost. Of course, availability of media can also change. However, this is less likely to occur than is change in the program schedule or station format. Moreover, availability is far more likely to increase than decrease. Although a broadcast station owner could turn in the station license and take it out of service, this happens rarely if ever. A more likely scenario is an increase in media availability as a new station enters the market.

- 424. If we were to adopt a usage measure designed to reflect our concern with local news and current affairs, we would need information on viewing/listening/reading of local news and current affairs material. To implement this procedure, it would be necessary first to determine which programming constituted news and current affairs. We believe that this type of content analysis would present both legal/Constitutional and data collection problems. News and current affairs content is not necessarily limited to regularly-scheduled news programs. So we could be faced with deciding which other programs were news and current affairs, whether some portion of a program not primarily news should count as news, and, indeed, whether portions of a news report devoted, e.g., to movie reviews should count as news. Overall ratings or (in the case of newspapers) subscription data would not suffice. Someone who subscribes to a daily newspaper but only reads the (nationally-distributed) comics and the classified advertisements is undoubtedly getting a valuable service, but it is not clear that the service has anything to do with news and current affairs. Similarly, a television station that attracts large audiences by virtue of its movies and national sports programming provides an important service, but it would be misleading to judge the station's importance as a local news outlet by its overall ratings.
- 425 Ultimately, our goal is not to prescribe what content citizens access, but to ensure that a wide range of viewpoints have an opportunity to reach the public. This goal, the limitations of current usage as a predictor of future usage, and the content classification requirements for implementing a usage measure all lead us to adopt an "equal share" approach to weighting outlets within the same medium.
- 426. We deviate from this approach only in the case of the Internet. We use subscription shares to divide the Internet category among the two current significant sources of Internet access—telephone companies and cable companies. In order to determine the number of subscribers to telephone company based Internet access, it is necessary to add together "dial-up" and DSL subscribers. Dial-up service is available to anyone with a telephone line and offers a low-capacity connection (up to 56 kbps). DSL service offers much higher speed connections, but, due to the requirements of the technology and certain physical limitations of the telephone distribution network, it is not available everywhere. Cable companies offer high speed Internet access, and most cable plant has been upgraded to support this service. Some applications, such as viewing video clips of news and other content, are not fully supported by dial-up services. Trade and industry sources estimate that, as of the end of 2002, 85 million households

⁹³⁷ Maurice E Stucke and Allen P Grunes, Antitrust and the Marketplace of Ideas, 69 ANTITRUST L J. 249, 277 (2001) (quoting U. S v General Dynamics Corp., 415 U.S. 486, 501 (1974)).

had access to cable high speed Internet service and 11.3 million subscribed. This leaves over 15 percent of households without access to cable modem service. Moreover, it is not clear how the areas in which cable modem service is unavailable compare to the areas in which DSL is unavailable. We therefore think it prudent to use subscriber figures to calculate how to divide the Internet category between cable and telephone companies.

427. Table 78 of FCC MOWG Study No. 8 provides information on Internet access. Respondents who said they have home access to the Internet were asked a follow-up question regarding how they access the Internet. The answers (in percentages) were as follows: cable line 18.9 percent, DSL line 14.7 percent, telephone line 66.1 percent, other 3.5 percent, don't know 5.9 percent, and refuse 0.5 percent The responses sum to 109.6 percent. If we take the 99.7 percent of respondents who picked cable, DSL, or telephone line as the base, and if we combine telephone and DSL, the resulting shares are 19 percent cable and 81 percent telephone. We recognize that, given the relatively small share of Internet in the total diversity market (12.5% weight), using subscriber shares rather than equal availability for Internet providers has a very small impact on our Diversity Index calculation. 939 In this regard, however, we reject the argument made by some commenters that we should not include the Internet at all. They argue that people only utilize the Internet to access their newspapers' and local broadcast stations' websites and, therefore, the Internet does not add to diversity. 940 Although many local newspapers and broadcast stations maintain websites with news content, that does not begin to plumb the extent of news sources on the Internet. Some websites compile news from numerous sources, many of which an individual may not have know of or known how to access (eg, The Drudge Report). Others are unique to the Internet (e.g., Salon). Moreover, we include the Internet because, as previously indicated, we are looking at availability of media, not the popularity of specific publications, stations, cable channels, or websites. There is a virtual universe of information sources on the Internet and there are websites not maintained by existing news media conveying information on everything from fringe political groups to local civic events. We cannot pretend that these are not in the "diversity" mix simply because only a small number of people may visit them.

e. Calculation Methodology

428 The Diversity Index is structured like an HHI, i.e., it is simply the sum of squared market

⁹³⁸ See Cable and Telecommunications Industry Overview 2002 Yearend, at http://www.ncta.com/industry_overview

As explained in the next section, "Calculation Methodology," our diversity index is calculated by squaring relevant market shares. If we were to assume that the two Internet sources had equal shares, the contribution to the index of Internet would be 78 points. The assumption we use as described in the text leads to a contribution to the index of 109 points. We do not attribute common ownership to Internet Service Providers, eg, even if Cox owns a television station and the local cable ISP in a market, we will not combine their market shares for the purposes of the Diversity Index calculation. We will assume (subject to examination at the next biennial review and to future findings we might make in our cable modern proceeding), that ISPs do not restrict subscriber access to Internet content based on the identity of the content provider. We also note that, as explained above, we are looking at the availability of news and information sources generally—and websites particularly—not their popularity.

See, eg, AFL-CIO Comments at 12-14, (citing Consumer Union Comments in MM Docket No. 01-235, Douglas Gomery, The FCC's Newspaper-Broadcast Cross-Ownership Rule An Analysis (Econ Policy Inst., Feb 2001)), AFTRA Comments at 10; UCC at al Comments at 23.

shares. As explained above, squaring market shares, unlike measures based on the "raw" market shares. permits construction of an index that takes account of the market shares of all providers in the "market" for viewpoint diversity. As noted above, the geographic market we are using is local. We currently define television markets in terms of the Nielsen DMA. DMAs are exhaustive classifications, covering the entire United States, and it is straightforward to count the number of television stations in a DMA. We are including public as well as commercial stations. Public stations provide viewpoint diversity; indeed that is a specific part of their mandate. Although they do not have the same programming incentives that commercial stations do, their partial reliance on viewer contributions means that they, like commercial stations, must be sensitive to the demands of their audience. We choose not to include television stations from outside the DMA in question, even if they obtain a measurable audience share in the DMA. Our focus is on local news and current affairs and it is not reasonable to assume that stations outside of the DMA in question will devote significant resources to news and current affairs programming targeted to that DMA Our cable television signal carriage rules generally permit a television broadcast station within a DMA to obtain cable carriage throughout the DMA, and our DBS signal carriage rules generally ensure that all television stations within a DMA are treated the same with respect to satellite retransmission. 941 For this reason, we assume that all television broadcast stations in a DMA are available throughout the DMA As explained above, each broadcast television station receives an equal share of the broadcast television weight.

429. We combine the television stations in each DMA with the radio stations in the Arbitron radio metro with which the DMA is paired. There are 287 Arbitron radio metros in the country. Each one is smaller than the DMA within which it lies. He arbitron radio metros do not cover the entire country. More sparsely populated areas are not included in radio metros; approximately one-half of radio stations are not in a metro market. As explained below in the cross-media limits section of this *Order*, we use the Diversity Index to help us identify markets that are "at risk" for excessive concentration in the "viewpoint diversity market". Once those markets have been identified, and cross-media limits imposed, the actual implementation of the cross-media diversity limits will not require information on a local radio market, only on the television market (DMA) within which the radio stations are located that are part of a proposed merger. As detailed in the cross-media limits section, the analysis that we use to identify at-risk markets is based on examination of a substantial sample of the 287 Arbitron radio metro markets.

430. Daily newspaper publication and circulation data are not collected based on Arbitron radio metros. A different market concept, developed by the Department of Commerce, is used by the industry. The basic building block is the "Metropolitan Statistical Area," or "MSA." The Department of Commerce recognizes 318 metropolitan areas, which include 248 MSAs, 58 "PMSAs" (primary metropolitan statistical areas), and 12 "NECMAs ("New England county metropolitan statistical areas"). For Diversity Index calculation purposes, these areas are matched to Arbitron radio metros. Each daily newspaper that is locally published in the metropolitan area is included in the market. The daily newspaper share of the Diversity Index is divided evenly among all daily newspapers included in the market. In the absence of market-specific information on weekly newspaper availability, we make the most conservative assumption that there is one independently-owned weekly newspaper in each local

⁹⁴¹ See 47 C.F R § 76 56 (Cable) and § 76.66 (DBS)

⁹⁴² Most radio metros lie wholly within a single DMA; virtually all of the others are predominantly within a single DMA

market, and assign to it the entire weekly newspaper share. 943

431 In terms of calculating the Index, within each medium we combine commonly-owned outlets and calculate each owner's share of the total availability of that medium. We then multiply that share by the share of the medium in question in the total media universe (television plus newspaper plus radio plus Internet). Once these shares in the overall "diversity market" have been calculated, we add together the shares of properties that are commonly-owned (e.g., a newspaper and a television station), square the resultant shares, and sum them to get the base Diversity Index for the market in question ⁹⁴⁴

4. Cross-Media Limits

- 432 In this Section we modify our rules by adopting a new set of cross-media limits ("CML") in lieu of our former newspaper/broadcast and television/radio cross-ownership rules.. The CML have been designed specifically to check the acquisition by any single entity of a dominant position in local media markets -- not in economic terms, but in the sense of being able to dominate public debate -- through combinations of cross-media properties. Because we have traditionally relied upon blanket prohibitions on certain cross-media combinations, we have never before had to confront head-on the challenge of identifying specifically which types of markets give us the greatest cause for concern in terms of preserving diversity of viewpoint, and which types of transactions are most problematic in this regard. This effort is complicated by the nature of the public interest we are seeking to protect diversity which is as elusive as it is cherished.
- 433. Our modification of the newspaper/broadcast and television/radio cross ownership rules into a set of cross-media limits or CML is our first comprehensive attempt to answer this difficult and complex set of questions. The CML derives from data in the record regarding the relative reliance by consumers of various types of media outlets for news and information. To help us analyze that data, we use a methodological tool a diversity index or "DI" that allows us to measure the degree to which any local market could be regarded as concentrated for purposes of diversity. Based on an analysis of a large sample of markets of various sizes, the diversity index suggests that the vast majority of local media markets are healthy, well-functioning, and diverse.
- 434. Moreover, because we are adopting herein intra-service competition caps for radio and television properties, those caps will ensure that local markets will continue to be served by a diversity of voices within each of these respective services. By the nature of the exercise, markets defined for competition purposes are no broader than, and generally are narrower than, markets defined for diversity purposes. Thus, our radio and television competition caps will not only serve to promote and protect competition within the radio and television services, they will also be protective of diversity interests when television-only or radio-only transactions are at issue. For example, in a market with 12 TV stations, our intra-service caps guarantee at least six different owners of television stations. If there are forty radio stations in the market, our radio cap will ensure at least six different owners of radio properties.
 - 435 We recognize, however, that our intra-service caps will not address diversity concerns that

⁹⁴³ In fact, there were 7,689 weekly newspapers in 2000, so it is likely that the average market has at least one weekly See NAA, supra note 200 at http://www.naa.org/info/facts02/13 facts2002 htm.

Appendix C, Diversity Indices in Ten Sample Markets, contains the Diversity Index calculations for the ten markets examined in MOWG Study No 1, based on the market structure as of November 2002.

may result from cross-media combinations. Although our local radio and television caps will ensure a significant number of independent voices in larger markets, cross-media combinations in very small markets might result in problematical levels of concentration for diversity purposes. Accordingly, we are herein supplementing our two intra-service local rules with a narrowly drawn set of cross-media limits to reach those combinations that are not already prohibited by our television or radio caps, but which would give rise to serious diversity concerns. The cross-media limits are based on a set of assumptions drawn directly from the record evidence in this proceeding and premises that are consistent with past Commission policy and practice. Although we rely in part on our data analysis to help define the CML, we clearly respect that diversity is inherently subjective and cannot be reduced to scientific formula. We do believe, however, that greater use of empirical data and evaluation of that data can significantly strengthen the reasoning that underlies our expert judgment. The CML, therefore, ultimately rests on our independent judgments about the kinds of markets that are most at-risk for viewpoint concentration, and the kinds of transactions that pose the greatest threat to diversity.

a. Competition Caps Protect Diversity

As set forth above, we have adopted a cap both on the number of television stations that any one owner may hold in a market, and on the number of radio stations that any one owner may hold in a market. These caps were designed to promote and protect competition within these two distinct services. The caps are, therefore, based on product market definitions that consider only those products or services that may be regarded as reasonable substitutes for competition purposes. We recognize, however, that although radio and television outlets may not compete in economic terms with other types of speech outlets, eg, newspapers, they all inhabit the mass media landscape that Americans turn to for news and information. In that sense, whatever the confines of their markets for competition purposes, many different outlets serve core democratic functions as purveyors of ideas, outlets for opinion, and distributors of news.

437. The data in the record evidence this difference. As set forth above, radio and television compete in economic terms in separate and distinct product markets. Both radio and television outlets, however, inhabit the larger speech market, as do several other types of entities. For example, MOWG Study No. 8, a consumer survey on media usage, reveals that, when asked to identify their primary source of all news and information -- both local and national --, approximately 40% of Americans responded that broadcast television was their primary source and approximately 10% of Americans responded that radio was their primary source. However, nearly 24% of respondents identified daily newspapers as their primary source of news and information, 18% identified cable news networks, 6% identified the Internet, and 2% identified weekly newspapers or magazines. These figures track closely results from a Pew Research Center survey asking similar questions about Americans' use of media for news and information. When asked where they turned for their primary source of election news, 39% of respondents said broadcast television, 24% said cable television, 24% said newspapers, 9% said radio, and 5% said the Internet. Other studies confirm that, today, Americans substitute among and between

⁹⁴⁵ MOWG Study No 8, Table 20

⁹⁴⁶ Id

⁹⁴⁷ The Pew Research Center for the People and the Press, Sources for Campaign News, Fewer Turn to Broadcast TV and Papers (Apr 27, 2003) at http://people-press.org/reports/display.php3?PageID=243.

many different sources for news and information on a regular basis.⁹⁴⁸ The record reflects, in short, that the "viewpoint" market in which television and radio stations participate is broader than the economic product markets, as defined by standard competition theory, in which either competes.⁹⁴⁹ As a result, intra-service caps designed to ameliorate competition concerns necessarily also will protect against undue concentration of speech outlets for diversity purposes.

- 438 Our diversity index helps to illustrate this point. Pursuant to our new local radio rule, no single owner, even in the smallest markets, will own more than 50% of the radio outlets. In larger markets, the percentage of radio outlets that can be held by any one entity is considerably smaller. Thus, using the most extreme set of facts, and using Altoona, Pennsylvania, as our test case, the diversity index focused on local news and information alone (again, the most conservative assumption) reveals a relatively minimal impact on viewpoint diversity even should the radio outlets become split between only two owners. The current base case DI for local news and information for Altoona is 960. If the local radio market were to become restructured into a duopoly, the DI would rise to only 1,156. Again, this hypothetical posits the most extreme restructuring of radio outlets in the smallest market among those in our test cases. The change in the diversity index will be far smaller as a result of radio transactions in larger markets or where the restructuring is less extreme.
- 439. Similarly, pursuant to our new local television rule, no single owner will be permitted to own more than two television outlets in most markets. Using Altoona again, a two-TV combination raises the base DI for local news and information by only 64 points. Indeed, using a set of randomly sampled markets of varying sizes, the average change in DI as a result of an owner of one television property buying another to create a television duopoly in a small market with only five licensed television stations is 91. In markets with twenty licensed television stations the change in DI as a result of the creation of a television duopoly is only six. Thus, although our intra-service television and radio caps are designed to protect and promote competition, they have a corollary benefit of also guarding against concentration in the viewpoint markets, at least with respect to intra-service combinations.
- 440 We recognize, however, that cross-media combinations that may impact the range and diversity of voices in local markets will not be captured by our television and radio caps. We therefore adopt, as described below, new cross-media limits targeted specifically and solely at the types of

⁹⁴⁸ See, eg, UCLA Internet Report

⁹⁴⁹ Fox Comments, Owen Statement

⁹⁵⁰ See Appendix C, Diversity Indices in Ten Sample Markets.

⁹⁵¹ *Id*

⁹⁵² Id In running this sample case, we assume that a duopoly would be permitted in the market even though, in fact, a new duopoly would not be permitted in Altoona under our new local television cap (Altoona has five stations and one existing duopoly, a second therefore would violate our top four restriction).

⁹⁵³ See Appendix D, Diversity Index Scenarios

⁹⁵⁴ Id We note, also, that our local television ownership cap includes a prohibition on top-four combinations. This will have the effect of prohibiting combinations of the local television stations most likely to produce and carry significant local news programming Thus, although the top-four restriction is based on competition theory, the rule will also have beneficial effects on local diversity.

transactions that would give us the most concern and which are not already prohibited by our intra-service caps

b. Foundations of the Cross-Media Limits

- 441 We begin with the proposition that, because this rule will limit the speech opportunities not only for broadcasters, but also for other entities that may seek to own and operate broadcast outlets (including those with the fullest First Amendment protection newspapers), we should draw the rule as narrowly as possible in order to serve our public interest goals while imposing the least possible burden on the freedom of expression. 955 We also recognize that the tools that we are using to evaluate market diversity involve as much art as science. "Diversity" is not susceptible to microscopic examination; it cannot be mapped with any known formal system or reduced to mathematical equations. Although we attempt to measure it and assign some quantitative value to it in order to understand relative diversity of different types of markets, we recognize that this process is inherently approximate. 956 We must exercise great care, therefore, before categorically prohibiting any particular transaction or set of transactions as a prophylactic matter.
- 442. Nonetheless, it is apparent, based on the record in this proceeding, that certain types of transactions in certain markets present an elevated risk of harm to the range and breadth of viewpoints that may be available to the public. Using our diversity index analysis and our independent judgment regarding desired levels of diversity, we first identify "at-risk" markets that might already be thought to be moderately concentrated for diversity purposes. We then identify the types of transactions that pose the greatest risk to diversity, and impose specific limits on those transactions in at-risk markets. Finally, because certain transactions in less concentrated markets pose a high risk of rapid concentration, we impose separate restrictions on transactions outside of the at-risk markets.

c. Identifying At-Risk Local Markets

443. We begin by identifying those markets most susceptible to high levels of viewpoint concentration; *i.e.*, those markets where our diversity concerns cut most deeply. At the outset, consistent with our past practice and precedent, we focus in this regard on local, not national, viewpoint market(s). Evidence in the record before us supports the conclusion that the number of outlets for national news and information is large and growing, and that government regulation is thus unnecessary to protect it. 959

⁹⁵⁵ See FOEF Comments at 41-42. WVRC Comments at 43-44.

⁹⁵⁶ Using the Diversity Index allows us to see different market characteristics in markets of different sizes. We have also found, however, that differentiating markets by the number of newspapers present is too blunt while differentiating markets by the number of radio stations is too fine. Therefore, we use the number of television stations as an identifier of market size.

⁹⁵⁷ Cf 1975 Multiple Ownership Second Report and Order, supra note 33 (in which we required divestiture in "egregious" newspaper/broadcast cases)

⁹⁵⁸ See Policy Goals Section III, supra, and the Diversity Index, Section VI(C)(3), supra.

⁹⁵⁹ See Appendix B, National News Sources.